

Home > Methodologies > Household financial resources methodology > December 2020

1 This release has ceased

Household financial resources methodology

Reference period December 2020

Released 30/06/2021

On this page

How the data is collected
How the data is processed
Comparability
Concepts and definitions
Accuracy
How the data is released
Glossary
Abbreviations

The preliminary estimates in this release are from the December quarter of the 2020-21 Survey of Income and Housing (SIH). Final estimates from all survey quarters will be released from mid-2022, in Household Income and Wealth, Australia (/statistics/economy/finance/household-income-and-wealth-australia/2017-18) and Housing Occupancy and Costs, Australia (/statistics/people/housing/housing-occupancy-and-costs/latest-release).

How the data is collected

Scope

The scope of the survey includes:

- all usual residents in Australia aged 15 years and over living in private dwellings
- both urban and rural areas in all states and territories, except for very remote areas of Australia and discrete Aboriginal and Torres Strait Islander communities.

The survey excludes the following:

- visitors to private dwellings
- overseas visitors who have not been working or studying in Australia for 12 months or more, or do not intend to do so
- members of non-Australian defence forces stationed in Australia and their dependants
- non-Australian diplomats, diplomatic staff and members of their households
- people who usually live in non-private dwellings, such as hotels, motels, hostels, hospitals, nursing homes and short-stay caravan parks
- households in very remote areas

• households in discrete Aboriginal and Torres Strait Islander communities.

The exclusion of very remote areas is unlikely to impact on national estimates, and will only have a minor impact on any aggregate estimates that are produced for individual states and territories, except the Northern Territory where the excluded population accounts for around 21% of the population.

Sample design

The December quarter SIH was enumerated from 18 September to 26 December 2020. The enumeration period broadly aligns with pension indexation rates. Dwellings were selected at random using a multistage area sample of private dwellings.

The 2020-21 sample was designed to:

- be representative of income patterns across the financial year
- produce national estimates that have a relative standard error (RSE) no greater than 5% for key income, wealth and housing cost indicators
- produce reliable state and territory estimates and capital city / rest of state estimates for key indicators (detailed estimates should be used with caution, especially for Tasmania, the Northern Territory and the Australian Capital Territory).

Quarterly estimates do not support all these design targets due to the smaller sample size of each quarter.

Final sample

The final sample for the December quarter was 3,080 households and 5,904 persons (aged 15 years and over).

Collection method

Selected households completed the survey online or by telephone only. There was no face-to-face interviewing conducted due to COVID-19 restrictions.

All households selected in the sample initially received a letter in the post with instructions for completing the survey online. Two reminder letters were sent to households. Households that were unable to complete the survey on-line were able to complete the survey with an interviewer over the telephone. Due to the COVID-19 pandemic, there was no face-to-face follow up for households that did not complete the survey. Where possible additional call back cards were left in letterboxes to initiate telephone interviews.

As there was no face-to-face interviewing in SIH 2020-21, there was a higher than usual proportion of non-response. Surveys with a high non-response may display non-response bias if the respondents who chose to participate in the survey do not adequately represent the entire population. This can result in biased estimates for some data items. Care must be exercised when making comparisons between this and previous surveys due to the higher non-response observed in 2020-21.

Once contact was made, one adult (aged 18 years and over) acted as the household's representative and answered questions about the household's financial situation (for example rent, rates, and loan payments) on behalf of the whole household. Each person aged 15 years and over then completed a personal interview, answering questions about their education, employment, income, and wealth.

Questionnaire

The 2020-21 SIH questionnaire will be available in the survey's Concepts, Sources, and Methods release, which will be due for release in mid-2022. The 2017-18 SIH questionnaire, in the <u>Survey of Income and Housing, User Guide, Australia, 2017-18 (https://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/6553.0?OpenDocument)</u> (cat. no. 6553.0), aligns closely with the 2020-21 questionnaire. New and modified questions to support monitoring of the

Preliminary estimates involved similar but less extensive coding and editing checks than are performed on annual estimates. This includes treatment of statistical outliers and removal of households that did not provide sufficient principal information (see <u>Survey of Income and Housing, User Guide, Australia, 2017-18 (https://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/6553.0?OpenDocument) (cat. no. 6553.0)).</u>

Some more intensive processing tasks were not performed in producing preliminary estimates. This has resulted in more sample being excluded from preliminary estimates, when compared to annual estimates. Survey weights (see below) have been calibrated to compensate for this additional loss.

The preliminary estimation method targeted key data items featured in this release and will be subject to revision when final estimates are produced.

Estimation methods

Every person (including children aged 0 to 14 years) and every household in the sample were assigned a weight. Initial weights were based on probability of being selected in the sample. The person and household level weights were calibrated to align with independent estimates of the in-scope population, referred to as benchmarks.

The estimates were benchmarked to the estimated resident population living in private dwellings in non-very remote areas of Australia for each quarter, excluding persons living in discrete Aboriginal and Torres Strait Islander communities. The estimates, therefore do not match estimates of the total Australian resident population (which include persons living in very remote areas and non-private dwellings, such as hotels) obtained from other sources

The benchmarks used additional information about the population to ensure that:

- people and households in the sample represented people and households that were similar to them
- the survey estimates reflected the distribution of the target population, not the sample.

The benchmarks used in the calibration of the final weights, for each quarter and state or territory, can be categorised into two groups:

Number of persons:

- by sex, in five-year age groups up to 80+ years for all states (excluding TAS, NT and ACT where age groups were collapsed further)
- by labour force status (except NT and ACT)
- by 2016 SEIFA Index for Relative Socioeconomic Disadvantage decile of household (state level).

Number of households:

• by household composition: For Vic, NSW, QLD and WA this includes number of adults (1, 2 or 3+) by whether or not the household contains children. For SA, Tas and ACT this includes households with 1, 2 or 3+ adults or households with one or more adults and children. NT only uses whether or not the household contains children.

Comparability

Previous collections

The concepts and standards used for preliminary estimates are unchanged from previous SIH collections. Table 1 presents data from the December quarter 2019 and December quarter 2020 preliminary estimates.

c Feedback

Australian System of National Accounts

Preliminary estimates have a similar level of coherence with the Australian System of National Accounts (ASNA) to that observed in previous SIH cycles.

In comparing SIH and ASNA, adjustments are necessary for each data source to account for scope and measurement differences. As the SIH and ASNA estimates of household income and wealth have been developed for different purposes, there are a few differences in the resulting estimates. These are covered in further detail in the <u>Survey of Income and Housing, User Guide, Australia, 2017-18 (https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6553.0Main+Features12017-18?OpenDocument)</u> (cat. no. 6553.0) alongside previous cycle comparisons.

Concepts and definitions

The concepts and definitions relating to income, wealth and housing statistics included in this release are described in Survey of Income and Housing, User Guide, Australia, 2017-18 (https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6553.0Main+Features12017-18?OpenDocument) (cat. no. 6553.0).

Accuracy

Reliability of estimates

Two types of error are possible in estimates based on a sample survey:

- · non-sampling error
- sampling error.

Non-sampling error

Non-sampling error is caused by factors other than those related to sample selection. It is any factor that results in the data values not accurately reflecting the true value of the population.

It can occur at any stage throughout the survey process. Examples include:

- selected people that do not respond (e.g. refusals, non-contact)
- questions being misunderstood
- responses being incorrectly recorded
- errors in coding or processing the survey data.

Sampling error

Sampling error is the expected difference that can occur between the published estimates and the value that would have been produced if the whole population had been surveyed. Sampling error is the result of random variation and can be estimated using measures of variance in the data.

Standard error

One measure of sampling error is the standard error (SE). There are about two chances in three that an estimate will differ by less than one SE from the figure that would have been obtained if the whole population had been included. There are about 19 chances in 20 that an estimate will differ by less than two SEs.

The relative standard error (RSE) is a useful measure of sampling error. It is the SE expressed as a percentage of the estimate:

$$RSE\% = \left(\frac{SE}{estimate}\right) \times 100$$

Only estimates with RSEs less than 25% are considered reliable for most purposes. Estimates with larger RSEs, between 25% and less than 50% have been included in the publication, but are flagged to indicate they are subject to high SEs. These should be used with caution. Estimates with RSEs of 50% or more have also been flagged and are considered unreliable for most purposes. RSEs for these estimates are not published.

Another measure of sampling error is the Margin of Error (MOE). This describes the distance from the population value that the sample estimate is likely to be within and is particularly useful to understand the accuracy of proportion estimates. It is specified at a given level of confidence. Confidence levels typically used are 90%, 95% and 99%.

For example, at the 95% confidence level, the MOE indicates that there are about 19 chances in 20 that the estimate will differ by less than the specified MOE from the population value (the figure obtained if the whole population had been enumerated). The 95% MOE is calculated as 1.96 multiplied by the SE:

$$MOE = SE \times 1.96$$

The RSE can also be used to directly calculate a 95% MOE by:

$$MOE(y) pprox rac{RSE(y) imes y}{100} imes 1.96$$

The MOEs in this publication are calculated at the 95% confidence level. This can easily be converted to a 90% confidence level by multiplying the MOE by:

$$\frac{1.615}{1.96}$$

or to a 99% confidence level by multiplying the MOE by:

$$\frac{2.576}{1.96}$$

Depending on how the estimate is to be used, an MOE of greater than 10% may be considered too large to inform decisions. For example, a proportion of 15% with an MOE of plus or minus 11% would mean the estimate could be anything from 4% to 26%. It is important to consider this range when using the estimates to make assertions about the population.

Confidence intervals

A confidence interval expresses the sampling error as a range in which the population value is expected to lie at a given level of confidence. A confidence interval is calculated by taking the estimate plus or minus the MOE of that estimate. In other terms, the 95% confidence interval is the estimate +/- MOE.

Calculating measures of error

Proportions or percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when the numerator (x) is a subset of the denominator (y):

$$RSE\left(rac{x}{y}
ight)pprox\sqrt{[RSE(x)]^2-[RSE(y)]^2}$$

When calculating measures of error, it may be useful to convert RSE or MOE to SE. This allows the use of standard formulas involving the SE. The SE can be obtained from RSE or MOE using the following formulas:

$$SE=rac{RSE\% imes estimate}{100}$$

$$SE = \frac{MOE}{1.96}$$

Comparison of estimates

The difference between two survey estimates (counts or percentages) can also be calculated from published estimates. Such an estimate is also subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x - y) may be calculated by the following formula:

$$SE(x-y) \approx \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

While this formula will only be exact for differences between unrelated characteristics or sub-populations, it provides a reasonable approximation for the differences likely to be of interest in this publication.

When comparing estimates between surveys or between populations within a survey, it is useful to determine whether apparent differences are 'real' differences or simply the product of differences between the survey samples.

One way to examine this is to determine whether the difference between the estimates is statistically significant. This is done by calculating the standard error of the difference between two estimates (x and y) and using that to calculate the test statistic using the formula below:

$$\left(\frac{|x-y|}{SE(x-y)}\right)$$

where

$$SE(y)pprox rac{RSE(y) imes y}{100}$$

If the value of the statistic is greater than 1.96, we can say there is good evidence of a statistically significant difference at 95% confidence levels between the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a real difference between the populations.

How the data is released

Release strategy

Publications

This release includes preliminary quarterly indicators for the December 2020 quarter of SIH.

Estimates for March and June 2021 quarters and the full financial year will be released within:

- Household Income and Wealth, Australia (/statistics/economy/finance/household-income-and-wealth-australia/ latest-release)
- Housing Occupancy and Costs, Australia (/statistics/people/housing/housing-occupancy-and-costs/latest-release)

These summary publications will be released from mid-2022.

Microdata

For users who would like to undertake more detailed analysis, microdata products from the 2020-21 SIH will be available from late 2022.

Information about current microdata services is available from the Microdata Entry Page (https://www.abs.gov.au/ websitedbs/D3310114.nsf/home/Microdata+Entry+Page).

Confidentiality

The Census and Statistics Act 1905 authorises the ABS to collect statistical information, and requires that information

is not published in a way that could identify a particular person or organisation. The ABS must make sure that information about individual respondents cannot be derived from published data.

Glossary

Show all

A fully glossary is available in the <u>Survey of Income and Housing, User Guide, Australia, 2017-18 (https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/6553.0Glossary12017-18) (cat. no. 6553.0).</u>

Additional terms referenced in this release include:

Coronavirus supplement

A supplement payment for new and existing recipients of JobSeeker, Parenting Payment, Youth Allowance for jobseekers, Farm Household Allowance and Special Benefit from 27 April 2020 to 31 March 2021. The rate payable during the December 2020 quarter was reduced from \$550 to \$250 per fortnight on 25 September 2020.

COVID-19 early access superannuation scheme

Eligible individuals adversely financially affected by COVID-19 were able to apply to access up to \$10,000 of their superannuation in the financial year 2019-20 between 20 April 2020 and 30 June 2020, and could apply for access again between 1 July 2020 and 31 December 2020.

Dissaving action

Any action where spending is greater than income, thereby reducing already accumulated savings or leading to borrowing to finance the expenditure. Examples of dissaving actions include any of the following actions because money was needed for basic living expenses:

- reducing home loan repayments
- drawing on savings or term deposits
- increasing balance owed on credit cards by \$1,000 or more
- entering into a loan agreement with family or friends
- taking out a personal loan
- selling household goods or jewellery
- selling shares or other assets.

Financial stress

A range of items which provide a subjective measure of the household's economic well-being. One person in each household was asked to provide assessments of the current household's circumstances. Items include management of household income, present standard of living compared with two years ago, ability to raise emergency money, and a range of cash flow problems.

JobKeeper payment

The JobKeeper payment scheme is a subsidy for businesses significantly affected by Coronavirus (COVID-19). It was introduced in April 2020 to help employers with the costs of their employees' wages. The rate payable during the December 2020 quarter was reduced on 28 September from \$1,500 to either \$1,200 or \$750 per fortnight (determined by hours worked between 1 March and 1 July 2020) for eligible workers.

c Feedback

JobSeeker payment

The JobSeeker payment scheme provides financial help for working aged Australians (aged between 22 and Age Pension age) who are looking for work or sick or injured and can't do usual work or study for a short time. JobSeeker payment was introduced on 20 March 2020 to replace the Newstart Allowance.

Socio-Economic Indexes for Areas (SEIFA)

Socio-Economic Indexes for Areas (SEIFA) is a product developed especially for those interested in the assessment of the welfare of Australian communities. The ABS has developed a set of indexes to allow ranking of regions/areas, providing a method of determining the level of social and economic well-being in each region. For further information about the SEIFAs, see <u>Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA) 2016 (https://www.abs.gov.au/ausstats/abs@.nsf/mf/2033.0.55.001) (cat. no. 2033.0.55.001).</u>

Abbreviations

Show all

A list of abbreviations is available in the <u>Survey of Income and Housing, User Guide, Australia, 2017-18 (https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/6553.0Abbreviations12017-18?opendocument&tabname=Notes&prodno=6553.0&issue=2017-18&num=&view=) (cat. no. 6553.0).</u>

Additional terms referenced in this release include:

COVID-19

Coronavirus disease 2019